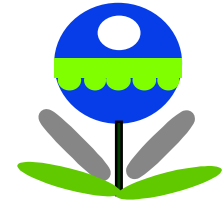


U.S. Environmental Protection Agency



Alternative Fuels

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EPA Goals

- **Improve Air Quality**
- **Increase vehicle efficiency**
- **Decrease greenhouse gas emissions**
- **Multiple pathways - vehicle, fuel, VMT**
- **One part of integrated “3E” goals**

Why Alternative Fuels?

Greatest potential to meet these multiple goals

- Lower ozone precursors and toxics**
- Reduce or eliminate particulates**
- More efficient, due to chemical properties**
- Can be produced from domestic, non-petroleum, renewable feedstocks**

Barriers to Alt Fuel Use

- **Very low gasoline prices**
- **Extensive petroleum infrastructure**
- **Lower energy density relative to gasoline, diesel**
- **Gasoline vehicles continue to be able to meet tighter emission standards**
 - **especially with use of RFG**
 - **less costly, less risky**

Reducing the Barriers

- ★ **Many coordinated efforts needed**
- **Federal fleet programs**
 - Public, private
- **Continue to build infrastructure**
- **Offer incentives (SIP credits, tax credits)**
- **Provide benefit models**
- **Public outreach, education**

AF Vehicle Objectives

- **Vehicles which meet tighter standards:
ULEV, ILEV, ZEV**
- **Advanced technologies - PNGV**
- **Role in proposed Tier 2 standards**
- **Alternative Fuels/Vehicles which are:**
 - **Dedicated**
 - **Clean**
 - **Efficient**
 - **Renewable**

AF Vehicle Programs

- **NLEV**
- **PNGV**
- **Clean Fuel Fleets**
- **Federal fleet acquisitions**
EPACT, Exec. Order
- **Certification issues**
New technologies, improved procedures
- **Voluntary Measures → SIP Credits**

PNGV

- Ultra efficient and clean 4SDI engines *optimized for renewable alcohol fuel*
- 4SDI in hybrid applications
- 4SDI with diesel, + aftertreatment
- Demonstrate ultra efficient and clean 4SDI engines optimized for gasoline
- Clean Diesel Engines (CIDI)

Clean Fuel Fleet Program

- **Mandated by Clean Air Act**
- **Encourages AFV Market**
- **Began in September 1998**
- **Eligible CO, Ozone non-attainment areas - currently 4 Cities (soon 5?)**
- **Requires % of new vehicle purchases of LDV and HDV to be ILEV**

Energy Policy Act

- **Enacted in 1992**
- **Public fleet purchase requirements**
- **EV income tax credit**
 - 10% of purchase price, up to \$4,000
 - pro-rated beginning in 2002, expires 2005
- **Tax deduction for refueling sites**

EPA Fuel Programs

- **Reformulated Gasoline**
 - On-going implementation issues (e.g. MTBE)
 - Transition to Phase 2 beginning Jan. 2000
- **Tier 2 Proposal**
 - Proposed lower sulfur levels in gasoline
 - ANPRM seeking comment on need for lower sulfur levels in diesel fuel
- **Low-greenhouse gas Fuels**
 - Exploring policy options
 - Evaluate/develop cost eff biomass-based fuels

OMS Alternative Fuel Team

- **Goal:** to advance the use of environmentally beneficial alternative fuels and vehicles
- **Objectives:**
 - Coord. AF efforts, internally, externally
 - Promote and support AF use
 - Unify EPA efforts and message
 - Develop policies and programs promoting AF
 - Coop with, and influence, other Agencies developing AF policies

Team Efforts

- **Workshops**
 - Modeling
 - Infrastructure
- **EPA AF vehicle acquisitions**
- **‘Green Cities’ Pilot program**
- **Low-GHG fuels initiative**
- **Fuel Composition Survey**
- **Outreach, education efforts**

We want to hear from you!

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